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PATENT

Paper No.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Inventor	:	Anthony F. Herbst and Wayne F. Perg
Serial No.	:	09/197,908
Filed	:	November 23, 1998
For	:	DIGITAL COMPUTER SYSTEM AND METHODS FOR MANAGING AN AUCTION MARKET FOR PREFERRED- RETURN SECURITIES
Group Art Unit	:	3624
Examiner	:	Akers, Geoffrey R.

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**BRIEF ON APPEAL  
ON BEHALF OF APPELLANT**

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Honorable Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

**BRIEF ON APPEAL**  
**ON BEHALF OF APPELLANT**

S I R :

This is an appeal from the Final Action of the Examiner dated July 25, 2002,  
rejecting claims all claims pending in this application.

Please charge the fee under 37 C.F.R. § 1.17, the fee for Extension of Time for  
filing of this Brief, and any other fee necessary for filing this Brief on Appeal, or for further  
prosecution, to Deposit Account No. 50-0235.

**II. Real Party In Interest**

Appellants, New Market Solutions, LLC, assignee of the patent application as  
shown on Patent and Trademark Office records, is the real party in interest in this matter.

**III. Related Appeals and Interferences**

Appellant has two other appeals in Ser. Nos. 09/280,244 and 09/375,817, however

these are not believed to be related by a claim of priority.

**IV. Status of All Claims**

All claims have been rejected.

**V. Status of All Amendments Filed Subsequent to Final Rejection**

None.

**VI. Concise Summary of the Invention**

The invention involves computer support in a process for creating and managing preferred-return securities data. In the context of preferred-return (all debt instruments plus preferred stock) securities data processing, buyers submit demand schedules, sellers submit supply schedules and the computer system determines the rate of return that matches the supply and demand, calculates prices and quantities, and executes the trades.

Using demand and supply schedules submitted on the basis of preferred return risk classes (including risk classes custom modified by the buyer or seller to include or exclude certain securities) broadens the market to include large numbers of smaller buyers and sellers, and agents acting for these smaller buyers and sellers, in an auction context for preferred return securities.

**VII. Reading of Claims on the Specification**

The claims on Appeal read on the specification as follows:

- |  |  |
|--|--|
| 1. A method for using a digital            | ...digital electrical...electrically process     |
| electrical machine to electrically process | signals in generating output ... Pg. 5, Lns.     |
| signals in generating output, the method   | 3-4  |
| including the steps of:                    |  |
| providing a first digital electrical       | ...providing a first digital electrical computer |
| computer apparatus including a digital     | apparatus including a digital computer           |

computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation, the processor being programmed to control the apparatus to receive the input data and to produce the output data by steps including:

respectively entering financial characteristics of preferred-return instruments representing investments;

respectively entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return;

respectively entering amounts that sellers want to sell of a member of a second

having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data into output having a visual presentation...to control the apparatus to receive the input data and to produce the output data by steps ... Pgs. 9, Ln. 27-Pg. 10, Ln. 5.

... respectively entering financial...preferred-return instruments representing investments... Pg. 10, Lns. 6-7.

...respectively entering amounts that buyers want to buy...the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return... Pg. 10, Lns. 7-10.

...respectively entering amounts that sellers want to sell of a member of a second group,

group, the second group consisting of at least one of the instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to the first group;

computing a supply schedule for each of said instruments corresponding to the second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and

generating the output including respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

the second group consisting of at least one of the instruments ... at the respective seller's hypothetical current preferred return... Pg. 10, Lns. 10-13.

...computing a demand schedule for each of said instruments corresponding to the first group... Pg. 10, Lns. 13-14.

...computing a supply schedule for each of said instruments corresponding to the second group... Pg. 10, Lns. 14-15

...comparing the schedules to produce a current preferred return for...instruments in both the first group and the second group... Pg. 10, Lns. 15-17.

...computing a price for each said instrument having a current preferred return... Pg. 10, Lns. 17-18.

...generating output representing respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price... Pg. 10, Lns. 18-20.

2. The method of claim 1,

further including the steps of:

respectively entering seller's  
information including holdings prior to a sale  
of the investment; and

generating further output  
representing respective sellers' holdings  
seller adjusted for the sale of the  
investment.

...respectively entering seller's information  
including holdings prior to a sale of the  
investment... Pg. 10, Lns. 22-23.

...generating further output representing  
respective sellers' holdings seller adjusted  
for the sale of the investment... Pg. 10, Lns.  
23-24.

3. The method of claim 1,  
wherein the step of entering financial  
characteristics includes entering a preferred  
return for the instrument as one of the  
financial characteristics.

entering financial characteristics includes  
entering a preferred return for the  
instrument, ...return for the instrument as  
one of the financial characteristics... Pg. 10,  
Lns. 26-29.

4. The method of claim 1,  
wherein the step of entering financial  
characteristics includes entering a face  
value for the instrument as one of the  
financial characteristics.

entering financial characteristics includes  
entering a preferred return for the  
instrument, ...return for the instrument as  
one of the financial characteristics... Pg. 10,  
Lns. 26-29.

5. The method of claim 1,  
wherein the step of entering financial

entering financial characteristics includes  
entering a preferred return for the



characteristics includes entering a payment schedule for the instrument as one of the financial characteristics.

6. The method of claim 1, wherein the step of entering financial characteristics includes entering an amortization schedule return for the instrument as one of the financial characteristics.

7. The method of claim 1, wherein further including the steps of:

computing any imbalance between each said supply schedule and each said demand schedule at the current preferred return for the investment; and

allocating the respective imbalances among the buyers for each excess in each said demand schedule and allocating the respective imbalances among the sellers for each excess in each said supply schedule.

8. The method of claim 7,

instrument, ...return for the instrument as one of the financial characteristics... Pg. 10, Lns. 26-29.

entering financial characteristics includes entering a preferred return for the instrument, ...return for the instrument as one of the financial characteristics... Pg. 10, Lns. 26-29.

...computing any imbalance between each said supply schedule...demand schedule at the current preferred return for the investment... Pg. 11, Lns. 2-4.

...allocating the respective imbalances among the buyers for...demand schedule and allocating the respective imbalances among the sellers for each excess in each said supply schedule... Pg. 11, Lns. 4-6.

...entering amounts that the sellers want to

wherein the step of entering amounts that the sellers want to sell includes entering information identifying some of the sellers as issuers of respective ones of the instruments; and wherein the step of allocating includes giving priority to the ones of the instruments.

9. The method of claim 1, wherein the step of entering the financial characteristics includes entering a right of first refusal.

10. The method of claim 1, wherein at least one of the step of entering the amounts that the buyers want to buy and the step of entering the amounts that the sellers want to sell includes optionally entering respective standing orders.

11. The method of claim 1, wherein at least one of the step of entering the amounts that the buyers want to buy and the step of entering the amounts that

sell includes entering information identifying some of the sellers as issuers of respective ones of the instruments... Pg. 11, Lns. 8-9.

...allocating includes giving priority to the ones of the instruments... Pg. 11, Ln. 10

The system 1 then determines 124 whether or not a right of first refusal applies to the instrument. Pg. 19, Lns. 27-28

...entering the amounts that the buyers want to buy and the step of entering the amounts that the sellers want to sell includes optionally entering respective standing orders. Pg. 11, Lns. 12-14

...entering the amounts that the buyers want to buy and the step of entering the amounts that the sellers want to sell includes optionally entering a respective time

the sellers want to sell includes optionally entering a respective time associated with the amounts for a sale to be completed.

12. The method of claims 1, wherein the steps of comparing the schedules, computing a price, and generating output are carried out whenever a criteria from a group consisting of at least a time period and an order quantity is satisfied.

13. The method of any one of claims 2, wherein the steps of comparing the schedules, computing a price, and generating output are triggered by the step of entering amounts that buyers want to by and the step of entering amounts that sellers want to sell.

14. The method of any one of claims 1-13, wherein:

the step of entering financial characteristics includes entering a risk class

associated with the amounts for a sale to be completed. Pg. 11, Lins. 16-18.

...comparing the schedules, computing a price, and generating output are carried out whenever a criteria from a group consisting of at least a time period and an order quantity is satisfied. Pg. 11, Lns. 19-21.

...comparing the schedules, computing a price, and generating output are triggered by the step of entering amounts that buyers want to by and the step of entering amounts that sellers want to sell. Pg. 11, Lns. 23-25.

...entering financial characteristics includes entering a risk class for the respective

for the respective instruments; and wherein:

the step of entering the amounts that the buyers want to buy includes entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class; and

the step of entering the amounts that the sellers want to sell includes entering amounts that sellers want to sell of a member from a second group, the second group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class.

15 The method of claim 1, further including:

providing a second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for

instruments... Pg. 11, Lns. 27-28.

...amounts that the buyers want to buy includes entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class... Pg. 11, Ln. 29-Pg. 12, Ln. 2.

...step of entering the amounts that the sellers want to sell includes entering amounts that sellers want to sell of a member from a second group, the second group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class. Pg. 12, Lns. 2-5.

...second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for storing and

storing and retrieving second machine-readable signals, to a second input device for receiving second input data and converting the second input data into second input electrical data, and to a second output device for converting second output electrical data into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce the second output data by steps including:

using data obtained from the first digital electrical computer in remotely generating, at said second digital electrical computer apparatus, output representing respective amounts of preferred return instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

16. A method for using a second digital electrical machine to electrically process data obtained from a first digital

retrieving second machine-readable signals, to a second input device for receiving second input data and converting the second input data into second input electrical data, and to a second output device for converting second output electrical data into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce the second output data... Pg. 12, Lns. 7-14.

...using data obtained from the first digital electrical computer in remotely generating, at said second digital electrical computer apparatus,...preferred return instruments respectively in association with at least one member of a group consisting of the current preferred return and the price. Pg. 12, Lns. 15-18.

...using a second digital electrical machine to electrically process data obtained from a first digital electrical computer apparatus

electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation and programming the processor to control the apparatus to receive the input data and to produce the output data, to remotely price a preferred return instrument representing an investment, the method including:

providing a second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for storing and retrieving second machine-readable signals, to a second input device for receiving second input data and converting the second input data into

including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data into output having a visual presentation and programming the processor to control the apparatus to receive the input data and to produce the output data, to remotely price a preferred return instrument representing an investment... Pg. 12, Lns. 20-27.

...providing a second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for storing and retrieving second machine-readable signals, to a second input device for receiving second input data and converting the second input data into

second input electrical data, and to a second output device for converting second output electrical data from the processor into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce the second output data;

obtaining data representing at least one of a group consisting of a price and a preferred rate of return for a member of a group consisting of at least one of the instruments and at least one group of the instruments, the data having been produced at the first digital electrical computer; and

utilizing said data in generating, at said second digital electrical computer remote from said first digital electrical computer, second output representing respective amounts of preferred-return instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

second input electrical data, and to a second output device for converting second output electrical data into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce the second output data... Pg. 12, Ln. 28-Pg. 13, Ln. 6.

...obtaining data representing at least one of a group consisting of a price and a preferred rate of return for a member of a group consisting of at least one of the instruments ...the instruments, the data having been produced at the first digital electrical computer... Pg. 13, Lns. 7-10.

...utilizing said data in generating, at said second digital electrical computer remote from said first digital electrical computer, second output representing respective amounts of preferred-return instruments respectively...a group consisting of the current preferred return and the price. Pg. 13, Lns. 10-13.

17. A method for managing a preferred-return investment auction, the method including the steps of:

managing, in real time, an auction of preferred-return instruments representing investments, including handling amounts that buyers want to buy and sellers want to sell of the instruments, and computing therefrom a price and a current preferred return corresponding to the instruments; and

generating respective amounts of the instruments in transactions of the auction, respectively in association with at least one member of a group consisting of the current preferred return and the price.

18. A method for remotely handling preferred return investment data, the method including the steps of:

obtaining in real time a price and a current preferred return of preferred return instruments in an auction; and

...capital markets can more efficiently allocate capital and increase the net (after financial market expenses) return to investors, thus reducing the cost of capital, preferably by facilitating real-time trading of preferred-return instruments by computerizing the auction activity. The functioning of our invention will also increase the inherent stability of the markets for preferred-return securities, thus reducing risk and further decreasing the cost of capital. The result is higher and more stable economic growth and increased wealth for both providers and users of funds. Pg. 13, Lns. 19-26.

...schedule at the current preferred return for the investment... Pg. 11, Lns. 3-4.

...computing a price for each said instrument having a current preferred return... Pg. 33, Lns. 22-24.



incorporating said price and said current preferred return in generating printable documentation at said remote computer of trading activity in said auction.

19. A method for making a digital electrical machine to electrically process signals in generating preferred-return documentation, the method including the steps of:

providing a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation; and

programming the processor to form circuitry therein to control the apparatus to receive the input data and to produce the

...data output device 23, such as a printer...

Pg. 15, Lns. 7-8; ...pertains to an auction for trading preferred return securities. Pg. 33, Lns. 4-5

...method for making the invention, article of manufacture (e.g., computer program and data on a storage medium), data structures, and necessary intermediates and products ... Pg. 13, Lns. 16-18.

...providing a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and...input electrical data, and to an output device for converting output electrical data into output having a visual presentation...Pg. 9, Ln. 27-Pg. 10, Ln. 3.

programming the processor (i.e., making circuitry therein...to control the apparatus to receive the input data and to produce the

output data by steps including:

receiving respectively entered financial characteristics sufficient to compute a price for preferred-return instruments representing investments;

receiving respectively entered amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return;

receiving respectively entered amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to the first group;

computing a supply schedule for each of said instruments corresponding to

output data ... Pg. 10, Lns. 3-5.

...respectively entering financial characteristics...representing investments... Pg. 33, Lns. 11-12.

...respectively entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return... Pg. 33, Lns. 13-15.

...respectively entering amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return... Pg. 33, Lns. 15-18.

...computing a demand schedule for each of said instruments corresponding to the first group... Pg. 33, Lns. 18-19.

...computing a supply schedule for each of said instruments corresponding to the

the second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and

generating the output including respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

20. A digital electrical machine to electrically process signals in generating preferred-return documentation, the machine including:

a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving

second group... Pg. 33, Lns. 20-21.

...comparing the schedules to produce a current preferred return...instruments in both the first group and the second group... Pg. 33, Lns. 21-22.

...computing a price for each said instrument having a current preferred return... Pg. 33, Lns. 22-23.

...generating output representing respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price. Pg. 33, Lns. 23-25.

...method for making the invention, article of manufacture (e.g., computer program and data on a storage medium), data structures, and necessary intermediates and products ... Pg. 13, Lns. 16-18.

...providing a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable

input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation; and wherein

the processor is programmed to form circuitry therein to control the apparatus to receive the input data and to produce the output data by steps including:

receiving respectively entered financial characteristics sufficient to compute a price for preferred-return instruments representing investments;

receiving respectively entered amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return;

receiving respectively entered amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the

signals, to an input device for receiving input data and...input electrical data, and to an output device for converting output electrical data into output having a visual presentation...Pg. 9, Ln. 27-Pg. 10, Ln. 3.

...programming the processor (i.e., making circuitry therein...to control the apparatus to receive the input data and to produce the output data ... Pg. 10, Lns. 3-5.

...respectively entering financial characteristics...representing investments... Pg. 33, Lns. 11-12.

...respectively entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return... Pg. 33, Lns. 13-15.

...respectively entering amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the instruments and at least one group of

instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to the first group;

computing a supply schedule for each of said instruments corresponding to the second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and

generating the output including respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

the instruments, at the respective seller's hypothetical current preferred return... Pg. 33, Lns. 15-18.

...computing a demand schedule for each of said instruments corresponding to the first group... Pg. 33, Lns. 18-19.

...computing a supply schedule for each of said instruments corresponding to the second group... Pg. 33, Lns. 20-21.

...comparing the schedules to produce a current preferred return...instruments in both the first group and the second group... Pg. 33, Lns. 21-22.

...computing a price for each said instrument having a current preferred return... Pg. 33, Lns. 22-23.

...generating output representing respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price. Pg. 33, Lns. 23-25.

#### **VIII. Concise Statement of All Issues Presented for Review**

1. Did the Examiner set out a prima face case of obviousness pursuant to 35 U.S.C. Sec. 103?

**IX. Grouping of Claims for Each Ground of Rejection Which Appellant Contests**

Each claim stands on its own.

**X. Argument**

**A. The Examiner failed to make out a case of *prima facie* obviousness because**

**1. Numerous steps are not disclosed or suggested.**

The Final Rejection contends that Broka, Hawkins, and/or Lawrence teach the following steps in claim 1 of the invention: 1) computing a demand schedule for each of said instruments; 2) computing schedule for each of said instruments; and 3) comparing the schedules to produce a current preferred return for each of the corresponding instruments. Contrary to the contentions, none of these are mentioned or suggested.

As to the supply schedule, the word “schedule” is mentioned in the Final Rejection at page 4, line 11, but the Final Rejection does not even allege a prior art disclosure of the supply schedule. Applicant cannot understand what the PTO is imagining with the contention of a disclosure of a supply schedule in Hawkins. See the Final Rejection on page 3, line 3. There is no supply schedule in Hawkins.

As to the demand schedule, the Final Rejection at page 4, line 8, contends that bids and asks constitute the demand schedule. This is plainly wrong: bids and asks are not a demand schedule. Broka does not teach the demand schedule, and Broka may deal with a system for debt securities pricing, but not the claimed system using supply and demand schedules.

The claims also require comparing the schedules, which cannot be shown because the cited art that has neither of the claimed schedules, let alone any comparing of them.

In sum, with no cited teaching of at least three of the method steps, it is respectfully submitted that the Patent and Trademark Office has not come even close to making out a *prima facie* case of obviousness “as a whole” pursuant to 35 U.S.C. Sec. 103.

See, e.g., *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

## **2. Problem solved by the invention was unknown**

This being the case, it seems like beating a dead horse to add other reasons for reversal. A few additional reasons seem noteworthy, however. The Board's attention is drawn to the specification, page 2, line 17 through page 4, line 23 for a discussion of the problem recognized by the inventors. The Board's attention is now drawn to the cited art to see that there is no cited recognition of the problem solved by the claimed invention. It is respectfully submitted that solving an unrecognized problem has not been shown to be obvious. See, e.g., *In re Peehs*, 612 F.2d 1287 (C.C.P.A. 1980) and *In re Nomiya*, 509 F.2d 566, 184 USPQ 607, 610 (CCPA 1975), *In re Spoonable*, 405 F.2d 578 (C.C.P.A. 1969), and *Eibel Process v. Minnesota & Ontario Paper*, 261 U.S. 45 (1923). Again the Examiner has failed to make out a case of *prima face* obviousness.

## **3. Beginning, intermediate, and end products were unknown**

Further, the present invention's starting materials, intermediate products, and end products that have not been shown as obvious either. The three entering steps require starting data not shown in the cited art. The steps of computing the schedules and comparing require intermediates that have not been shown in the cited art. And the step of generating requires output having antecedent requirements in the foregoing steps, (i.e., the price and the current preferred return) that have also not been shown in the cited art. As per *In re Ochiai*, (CA FC) 37 USPQ 3d 1127 (Dec. 11, 1995) and *In re Brower, et al.*, 167 USPQ (CCPA 1970) unobvious starting material, end product, and intermediate products establish unobviousness over the cited art.

## **4. No proper reason to combine**

At page 3, the Examiner states that his reason to combine is "to teach a system..." i.e., to teach the claimed invention. The Examiner has provided no reason why anyone would

want “to teach ...” the claimed invention, but for the inspiration of the Appellant’s claims.

With no proper reason to combine, the Examiner has failed to make out a *prima face* case of obviousness.

## **B. Individual Claims**

At page 3 of the Final Rejection, the Examiner contends that “Claims 2-15 are rejected because by their dependence they include the language of a rejected base claim.”

In response, it appears that the Examiner should have found claims 2-15 allowable if rewritten to include the limitations of the base claim, but respectfully, Appellant has had difficulty imagining what the Patent and Trademark Office was thinking of in this case because the cited art is so remote from the claims. While the argument above generally applies to all claims, to be certain, the above argument is further applied below to the individual claims.

In addition to the argument set out above, in claim 1 as a whole, the entering, computing, comparing, and generating steps are not shown in the cited art.

In addition to the argument set out above, in claim 2 as a whole, the steps of entering and generating are not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 3 as a whole, the step of entering a preferred return is not shown or suggested in the cited art.

In addition to the argument set out above, in claim 4 as a whole, the step of entering a face value is not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 5 as a whole, the step of entering a payment schedule is not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 6 as a whole, the step of



entering an amortization schedule is not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 7 as a whole, the steps of computing an imbalance and allocating the respective imbalances have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 8 as a whole, the steps of entering and allocating... giving priority have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 9 as a whole, the step of entering a right of first refusal has not been shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 10 as a whole, the steps of entering... including respective standing orders have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 11 as a whole, the step of entering... optionally including a respective time associated with the amounts for the sale to be completed has not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 12 as a whole, the steps of generating... and comparing are carried out whenever a criteria from. ... a time period and an order quantity is satisfied have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 13 as a whole, the steps of comparing, computing, and generating being triggered by the step of entering the amounts has not shown or suggested in the cited art, especially in connection with the claimed preferred return

instruments.

In addition to the argument set out above, in claim 14 as a whole, the steps involving risk class have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 15 as a whole, the steps involving a second computer cooperating with the first computer have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 16 as a whole, the steps involving a second computer cooperating with the first computer have not shown or suggested in the cited art, especially in connection with the claimed preferred return instruments.

In addition to the argument set out above, in claim 17 as a whole, the steps involving managing, in real time, an auction representing preferred-return securities in combination with the generating have not shown or suggested in the cited art.

In claim 18, in connection with a method as a whole, the obtaining in real time... a price and a current preferred return and the step involving generating printable documentation at said remote computer of trading activity are suggested no where in the cited art.

In claim 19, in connection with a method as a whole, the second group and hypothetical current preferred return are suggested no where in the cited art.

In claim 20, in connection with an apparatus as a whole, the second group and hypothetical current preferred return are suggested no where in the cited art.

In sum, the cited art fails to show many claimed features and indeed is quite remote, shows no recognition of the problem solved, shows none of the starting, intermediate or final products, and has been combined for no plausible reason (i.e., only “to teach” the claimed invention). Individual claim limitations were not particularly addressed in the Final Rejection, though specific arguments for each have been set out above largely in trying to respond to a

Patent and Trademark Office rejection that, respectfully, is not easy to understand.

**XI. CONCLUSION**

Based on the arguments and case law citations presented above, it is respectfully requested that the Examiner's rejections be reversed and the application be passed on to allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'P. K. Trzyzna', written over a horizontal line.

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## **Appendix**

1. A method for using a digital electrical machine to electrically process signals in generating output, the method including the steps of:

providing a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation, the processor being programmed to control the apparatus to receive the input data and to produce the output data by steps including:

respectively entering financial characteristics of preferred-return instruments representing investments;

respectively entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return;

respectively entering amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to the first group;

computing a supply schedule for each of said instruments corresponding to the second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and

generating the output including respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

2. The method of claim 1, further including the steps of:  
respectively entering seller's information including holdings prior to a sale of the investment; and  
generating further output representing respective sellers' holdings seller adjusted for the sale of the investment.

3. The method of claim 1, wherein the step of entering financial characteristics includes entering a preferred return for the instrument as one of the financial characteristics.

4. The method of claim 1, wherein the step of entering financial characteristics includes entering a face value for the instrument as one of the financial characteristics.

5. The method of claim 1, wherein the step of entering financial characteristics includes entering a payment schedule for the instrument as one of the financial characteristics.

6. The method of claim 1, wherein the step of entering financial characteristics includes entering an amortization schedule return for the instrument as one of

the financial characteristics.

7. The method of claim 1, wherein further including the steps of:  
computing any imbalance between each said supply schedule and each said demand schedule at the current preferred return for the investment; and  
allocating the respective imbalances among the buyers for each excess in each said demand schedule and allocating the respective imbalances among the sellers for each excess in each said supply schedule.

8. The method of claim 7, wherein the step of entering amounts that the sellers want to sell includes entering information identifying some of the sellers as issuers of respective ones of the instruments; and wherein the step of allocating includes giving priority to the ones of the instruments.

9. The method of claim 1, wherein the step of entering the financial characteristics includes entering a right of first refusal.

10. The method of claim 1, wherein at least one of the step of entering the amounts that the buyers want to buy and the step of entering the amounts that the sellers want to sell includes optionally entering respective standing orders.

11. The method of claim 1, wherein at least one of the step of entering the amounts that the buyers want to buy and the step of entering the amounts that the sellers want to sell includes optionally entering a respective time associated with the amounts for a sale to be completed.

12. The method of claims 1, wherein the steps of comparing the schedules, computing a price, and generating output are carried out whenever a criteria from a group consisting of at least a time period and an order quantity is satisfied.

13. The method of any one of claims 2, wherein the steps of comparing the schedules, computing a price, and generating output are triggered by the step of entering amounts that buyers want to buy and the step of entering amounts that sellers want to sell.

14. The method of any one of claims 1-13, wherein:

the step of entering financial characteristics includes entering a risk class for the respective instruments; and wherein:

the step of entering the amounts that the buyers want to buy includes entering amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class; and

the step of entering the amounts that the sellers want to sell includes entering amounts that sellers want to sell of a member from a second group, the second group consisting of at least one of the instruments and at least one group of the instruments defined by a common risk class.

15 The method of claim 1, further including:

providing a second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for storing and retrieving second machine-readable signals, to a second

input device for receiving second input data and converting the second input data into second input electrical data, and to a second output device for converting second output electrical data into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce the second output data by steps including:

using data obtained from the first digital electrical computer in remotely generating, at said second digital electrical computer apparatus, output representing respective amounts of preferred return instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

16. A method for using a second digital electrical machine to electrically process data obtained from a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation and programming the processor to control the apparatus to receive the input data and to produce the output data, to remotely price a preferred return instrument representing an investment, the method including:

providing a second digital electrical computer apparatus including a second digital computer having a second processor, the second processor electrically connected to a second memory device for storing and retrieving second machine-readable signals, to a second input device for receiving second input data and converting the second input data into second input electrical data, and to a second output device for converting second output electrical data from the processor into second output having a second visual presentation and programming the second processor to control the apparatus to receive the second input data and to produce



the second output data;

obtaining data representing at least one of a group consisting of a price and a preferred rate of return for a member of a group consisting of at least one of the instruments and at least one group of the instruments, the data having been produced at the first digital electrical computer; and

utilizing said data in generating, at said second digital electrical computer remote from said first digital electrical computer, second output representing respective amounts of preferred-return instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.

17. A method for managing a preferred-return investment auction, the method including the steps of:

managing, in real time, an auction of preferred-return instruments representing investments, including handling amounts that buyers want to buy and sellers want to sell of the instruments, and computing therefrom a price and a current preferred return corresponding to the instruments; and

generating respective amounts of the instruments in transactions of the auction, respectively in association with at least one member of a group consisting of the current preferred return and the price.

18. A method for remotely handling preferred return investment data, the method including the steps of:

obtaining in real time a price and a current preferred return of preferred return instruments in an auction; and

incorporating said price and said current preferred return in generating printable

documentation at said remote computer of trading activity in said auction.

19. A method for making a digital electrical machine to electrically process signals in generating preferred-return documentation, the method including the steps of:

providing a first digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data from the processor into output having a visual presentation; and

programming the processor to form circuitry therein to control the apparatus to receive the input data and to produce the output data by steps including:

receiving respectively entered financial characteristics sufficient to compute a price for preferred-return instruments representing investments;

receiving respectively entered amounts that buyers want to buy of a member from a first group, the first group consisting of at least one of the instruments and at least one group of the instruments, at the respective buyer's hypothetical current preferred return;

receiving respectively entered amounts that sellers want to sell of a member of a second group, the second group consisting of at least one of the instruments and at least one group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to the first group;

computing a supply schedule for each of said instruments corresponding to the second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and  
generating the output including respective amounts of the instruments  
respectively in association with at least one member of a group consisting of the current  
preferred return and the price.

20. A digital electrical machine to electrically process signals in generating  
preferred-return documentation, the machine including:

a first digital electrical computer apparatus including a digital computer having a  
processor, the processor electrically connected to a memory device for storing and retrieving  
machine-readable signals, to an input device for receiving input data and converting the input  
data into input electrical data, and to an output device for converting output electrical data from  
the processor into output having a visual presentation; and wherein

the processor is programmed to form circuitry therein to control the apparatus  
to receive the input data and to produce the output data by steps including:

receiving respectively entered financial characteristics sufficient to compute a  
price for preferred-return instruments representing investments;

receiving respectively entered amounts that buyers want to buy of a member  
from a first group, the first group consisting of at least one of the instruments and at least one  
group of the instruments, at the respective buyer's hypothetical current preferred return;

receiving respectively entered amounts that sellers want to sell of a member of a  
second group, the second group consisting of at least one of the instruments and at least one  
group of the instruments, at the respective seller's hypothetical current preferred return;

computing a demand schedule for each of said instruments corresponding to  
the first group;

computing a supply schedule for each of said instruments corresponding to the

second group;

comparing the schedules to produce a current preferred return for each of the corresponding instruments in both the first group and the second group;

computing a price for each said instrument having a current preferred return; and

generating the output including respective amounts of the instruments respectively in association with at least one member of a group consisting of the current preferred return and the price.